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(71) Applicant: **Nihon Shinku Gijutsu Kabushiki**  
**Kaisha**  
**Chigasaki-shi, Kanagawa 253-0071 (JP)**

(72) Inventors:

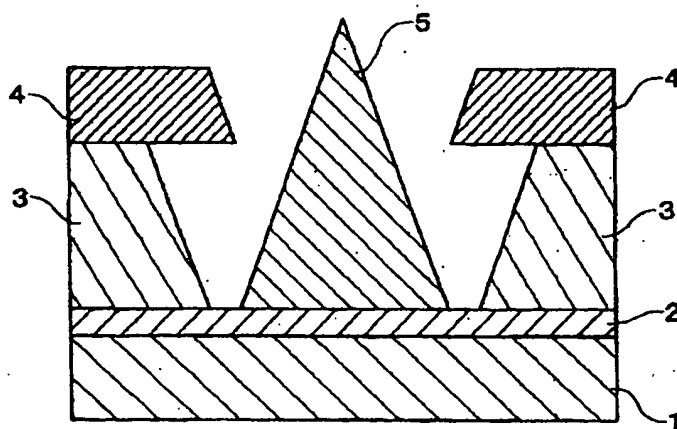
- **Murakami, Hirohiko, Nihon Shinku Gijutsu K. K.**  
**Tsukuba-shi, Ibaraki-ken 300-2635 (JP)**
- **Hirakawa, Masaaki, Nihon Shinku Gijutsu K. K.**  
**Tsukuba-shi, Ibaraki-ken 300-2635 (JP)**
- **Tanaka, Chiaki, Nihon Shinku Gijutsu K. K.**  
**Tsukuba-shi, Ibaraki-ken 300-2635 (JP)**

(74) Representative: **Körber, Wolfhart, Dr. et al**  
**Patent- und Rechtsanwälte Mitscherlich &**  
**Partner, Sonnenstrasse 33**  
**80331 München (DE)**

(54) **Graphite nanofibers and their use**

(57) A graphite nanofiber material herein provided has a cylindrical structure in which graphene sheets each having an ice-cream cone-like shape whose tip is cut off are put in layers through catalytic metal particles; or a structure in which small pieces of graphene sheets having a shape adapted for the facial shape of a catalytic metal particle are put on top of each other through the

catalytic metal particles. The catalytic metal comprises Fe, Co or an alloy including at least one of these metals. The material can be used for producing an electron-emitting source, a display element, which is designed in such a manner that only a desired portion of a luminous body emits light, a negative electrode carbonaceous material for batteries and a lithium ion secondary battery.

**FIG.1**



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# EUROPEAN SEARCH REPORT

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THE HAGUE	28 November 2001	Tarrida Torrell, J	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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